

Eltroplectris brachycentron Szlachetko (Orchidaceae), a New Orchid Species from Bolivia

Dariusz L. Szlachetko

Gdansk University, Department of Plant Ecology and Nature Protection,
Al. Legionow 9, 80-441 Gdansk, Poland

ABSTRACT. *Eltroplectris brachycentron* Szlachetko from Bolivia is described and illustrated, and its taxonomic position is briefly discussed. An illustrated key to the Bolivian species of *Eltroplectris* is provided.

The genus *Eltroplectris* Rafinesque, with 12 species, is comprised of terrestrial orchids from Central and South America. The characteristic feature of this genus is the presence of a threadlike spur, formed by lateral sepals fused to each other in their lower parts and the basal part of the lip. At first glance, *Eltroplectris* appears similar to *Pelexia* Poiteau ex Lindley. The two genera differ, however, in the structure of the rostellum and viscidium (Fig. 1). In *Eltroplectris*, the viscidium is semi-sheathlike and slips from the rostellum, leaving the subulate, sharp core of the rostellum. In *Pelexia*, the viscidium originates on the external surface of the rostellum, is massive and nodular; the rostellum remnant is ribbonlike and obtuse at the apex. *Eltroplectris* also appears to be related to *Pteroglossa* Schlechter. In both genera, the rostellum and viscidium are similar in structure; the differences primarily concern the structure of the spur. In *Eltroplectris* the lateral sepals are fused into a tube along the entire length of the free section of the spur, whereas in *Pteroglossa* the lateral sepals remain free to the apex of the spur. In *Eltroplectris*, the free section of the spur is more or less equal to the length of the part adhering to the ovary; in *Pteroglossa* the spur is only free at the apex and frequently forms a chin at the base of the ovary. In view of such clear criteria differentiating the two genera, the fact that Garay (1982) transferred *Eltroplectris lurida* (Correa) Pabst, a species closely related to *E. misera* (Kraenzlin) Szlachetko, to *Pteroglossa* is striking.

While studying herbarium material of *Eltroplectris* at BM, I found a new species from Bolivia.

Eltroplectris brachycentron Szlachetko, sp. nov.

TYPE: Bolivia. Choretí, 3 mi. from Comiri, a pumping station on the pipeline above Rio Perapeti, 20°00'S, 63°30'W, 13 Sep. 1949, Brooke 5634 (holotype, BM). Figure 2.

Species haec *E. miserae* propinqua, sed pede columnae et calcare ovario manifeste breviori et labello ad clinandrium adnato sub apicem constricto jam diagnoscenda.

Stem 28 cm long, 2 mm diam. at base, 1 mm diam. below inflorescence, erect, delicate, glabrous. No leaves at flowering time. Cauline bracts 8, herbaceous, transparent, membranous, acute, adnate to the stem, lower bracts longer, upper bracts shorter than internodes. Inflorescence 12.5 cm long, 25- to 30-flowered, multilateral, lax. Flowers small, arcuate, glabrous. Floral bracts 9 mm long, ovate-lanceolate, acuminate, 3-nerved, herbaceous, transparent, membranous, in lower flowers longer than ovaries, in upper ones equal in length to ovaries. Ovary 6 mm long, twisted at base, ovary neck about 1 mm long. Dorsal sepal 5 mm long, 1.8 mm wide, ovate-lanceolate, acuminate, 3-nerved, slightly concave in the center, fleshy, thickened at the apex. Free part of the lateral sepals 4 mm long, 1.3 mm wide, lanceolate, acuminate, 3-nerved, delicate, rather fleshy, slightly thickened at apices. Petals 4 mm long, 1 mm wide, lanceolate-falcate, subobtuse, 3-nerved, thin, slightly adnate to dorsal sepal. Lip subsessile, constricted at the apex, thin, delicate, papillate, distinctly adnate to the clinandrium; basal part of hypochile 3.2 mm long, 0.8 mm wide, linear, apical part of hypochile 3.2 mm long, 2.5 mm wide, oval; epichile 1 mm long, 0.9 mm wide, ovate, obtuse. Spur partially free, formed from the column foot, lip and basal parts of lateral sepals, as long as one-half of the ovary. Free part of the spur 1 mm long, subulate. Gynostemium 3 mm long, erect, short, relatively massive. Column foot 3 mm long, with the apical 1 mm free. Anther 1.8 mm long. Rostellum remnant 0.4 mm long, subulate, acute.

Etymology: *brachys* (Greek), short; *centron* (Greek), spur; an allusion to the short and sharply pointed spur.

Eltroplectris brachycentron Szlachetko is closely related to *E. misera* (Kraenzlin) Szlachetko. Both of the species share a similar habit and gynostemium structure, but differ in the length of the spur, lip form, and adnation between lip and clinandrium.

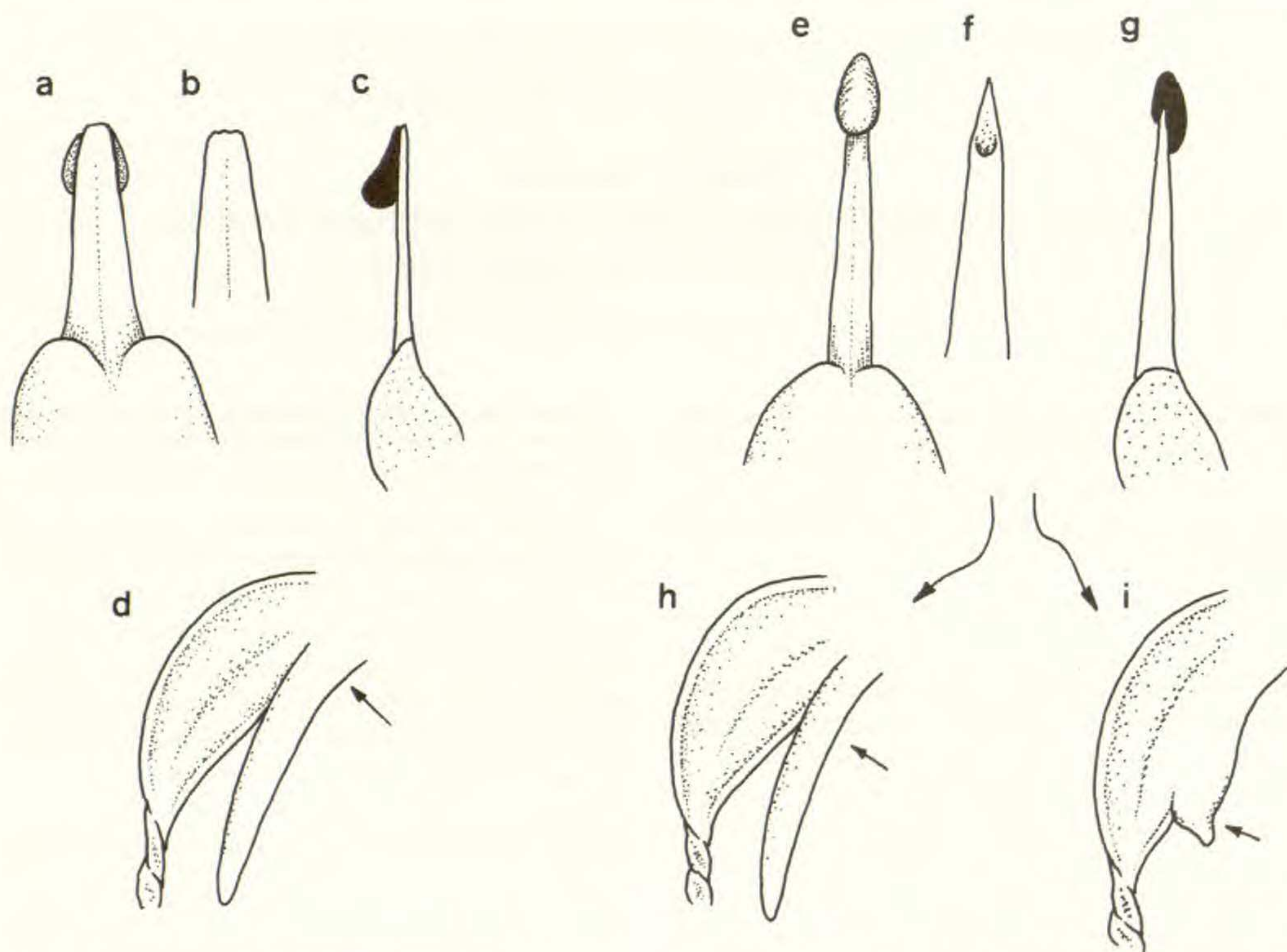


Figure 1. Gynostemium structure and spur of *Pelexia* (a–d), *Eltroplectris* (e–g, h) and *Pteroglossa* (e–g, i). —a, e. Rostellum with viscidium, bottom view. —b, f. Rostellum remnant. —c, g. Longitudinal section of rostellum and viscidium. —d, h, i. Spur, pedicel, and ovary.

um. In *E. brachycentron* the spur reaches to the mid point of the ovary, the lip is distinctly constricted at the apex, and the side lobes of the lip are agglutinate with the clinandrium. In *E. misera* the spur is as long as the ovary, the lip is not divided into a hypochile and epichile, and it is completely free from the clinandrium. *Eltroplectris misera* (Kraenzlin) Szlachetko is well illustrated by Dodson & Vasquez (1989a: 214) (as *E. travassosii* (Rolfe) Garay).

It is worth noting that apart from *E. brachycentron* and *E. misera*, three other species of the genus are known so far from Bolivia: *E. longicornu* (Cogniaux) Pabst, described and known hitherto only from southern Brazil; *E. triloba* (Lindley) Pabst, illustrated by Dodson & Vasquez (1989b: 321) as *E. calcarata* (Swartz) Garay & Sweet; and *E. roseo-alba* (Reichenbach f.) Hamer & Garay.

The Bolivian species of *Eltroplectris* can be separated as follows (Fig. 3):

- 1a. Lip elliptic in general outline, usually constricted near the middle, flowers large, leaves gathered in the basal rosette, obovate, sessile . . . *E. roseo-alba*

- 1b. Lip of different shape, constricted near the apex if at all, flowers small, leaves petiolate if present at flowering time.
 2a. Hypochile linear in the basal part, \pm dilated in the apical part, side lobes rounded.
 3a. Lip constricted near the apex, apical half of hypochile elliptic, spur half as long as the ovary *E. brachycentron*
 3b. Lip not constricted, the apical half narrowly elliptic, spur nearly as long as the ovary *E. misera*
 2b. Hypochile triangular, side lobes triangular, epichile ligulate to lanceolate.
 4a. No leaves at flowering time, spur longer than ovary and pedicel, lateral sepals lanceolate *E. longicornu*
 4b. Leaves long petiolate, forming the basal rosette at flowering, spur as long as the ovary and pedicel or shorter, lateral sepals strongly falcate *E. triloba*

Acknowledgments. I am grateful to the curator of BM for the hospitality during my visit, and Ryszard Ochrya for the latinization of the diagnosis.

Literature Cited

- Dodson, C. H. & R. Vasquez Ch. 1989a. Orchids of Bolivia. *Icones Plantarum Tropicarum*. Ser. 2, fasc. 3: 201–300. Missouri Botanical Garden, St. Louis.

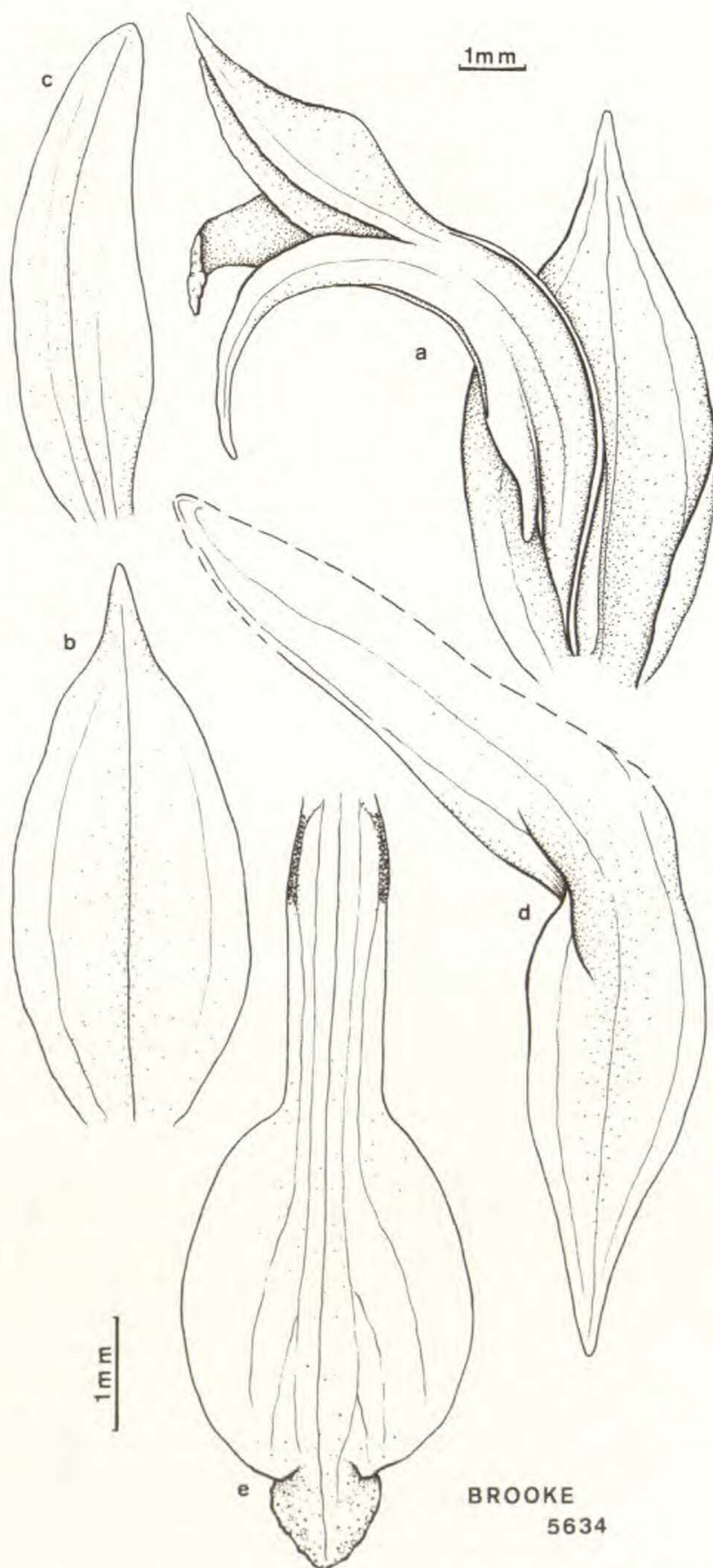


Figure 2. *Eltroplectris brachycentron* Szlachetko. —a. Flower and floral bract. —b. Dorsal sepal. —c. Petal. —d. Lateral sepal. —e. Lip. Drawn from the holotype.

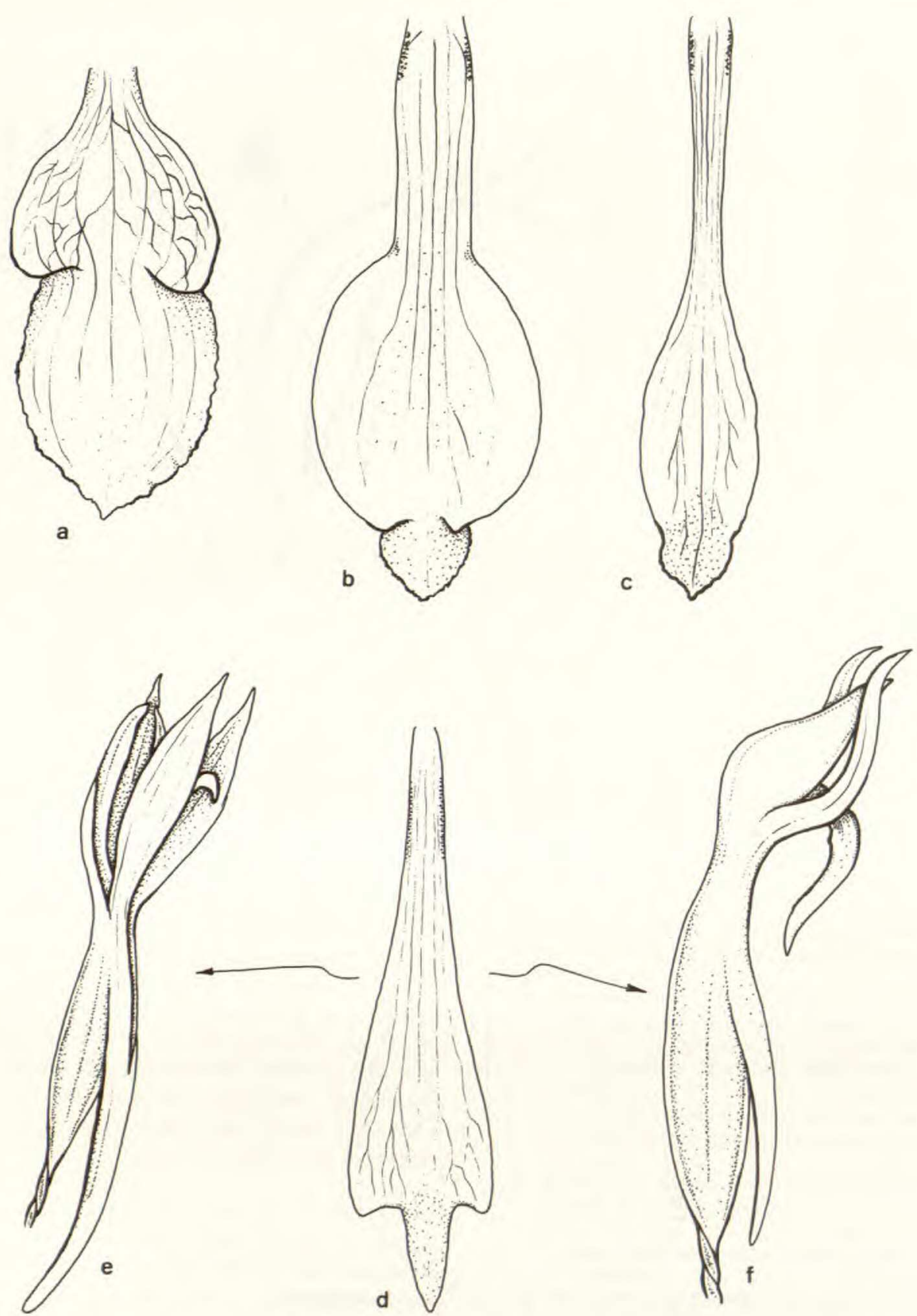


Figure 3. An illustrated key to the Bolivian species of *Eltroplectris*. —a. *E. roseo-alba* (Reichenbach f.) Hamer & Garay. —b. *E. brachycentron* Szlachetko. —c. *E. misera* (Kraenzlin) Szlachetko. —d. Lip shape of *E. longicornu* (Cogniaux) Pabst (e) and *E. triloba* (Lindley) Pabst (f).

——— & ———. 1989b. Orchids of Bolivia. *Icones Plantarum Tropicarum*. Ser. 2, fasc. 4: 301–400. Missouri Botanical Garden, St. Louis.

Garay, L. A. 1982. A generic revision of the *Spiranthinae*. *Bot. Mus. Leaflet*. Harvard Univ. 28(4): 277–425.